No. 1st Ra Bill

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

Division: **Electricals** Sub-Division: **Electricals** Date.....2010

Bill Received No. Dated 17/10/17 Divisional / Sub Divisional Cash Book Voucher No..... Dated.....

Schedule Docket No. Head of Account : ~~P 2093 Dasarahalli kere lake~~ P1771 POW

D.R.No

Name of Work : *Providing Street Lights And Electrical Poles in Ward no 13 in shettyhalli sub division*

Name of Contractor and Full Address:- Srinath Electricals.

Reference to Agreement No:EE/Ele/DZ/WO/10/17-18 Date:17/05/2017 Job No 013-17-000033

Certified that the measurements were taken by me on 17/10/17 and recorded of Pages 5/244 to 46 of Measurement Book No. 5/125/17-18 and that the work is satisfactorily executed.

For Srinath Electricals

Contractor

JUNIOR ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore

Officer-in-charge of work

Certified that the measurement were taken by me on 17/10/17 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

ASST. EXECUTIVE ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore

Sub-Division Officer

II Memorandum of Payment

1) Total value of work done or supplies made as per account within		
2) Deduct amount to be held in reserve being .....percent Rs.....		
3) " Balance		
4) Deduct Payment:		
a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... adjusted towards cash advance recovery of	Amount	1741175 =
b) Payments Now made: cost store or other material supplied.	2%. IT	34825 =
recovery of amount creditable to this/other work	1%. LWC	17415 =
Amount paid on this bill Cheque / Cash.	0.1%. CBF	1745 2
5) Balance being unpaid value of work done held in reserve.	TD	53985 =
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	Net	1687190 =
7) Net amount due to or from Contractor unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		
Total amount adjusted -		

For Srinath Electricals

Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum

Audited and admitted for Rs. 1741175 in final settlement of all demands)

Witness

Passed by Cheque for Rs. 1687190

(Rupees Ten lakh eighty seven thousand one hundred and ninety only)

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.

by adjustment Rs. 53985

Dated.....

Initials of Officer making payment

Accounts Superintendent Exe. Engineer (Ele)

B.B.M.P. Dasarahalli Division

For Srinath Electricals

Stamp

Proprietor

(For use in the Office)

Executive Engineer

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Sl. No.	Description of item	
1	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II.90 Watts	each
2	Supplying of LED Floodlight with .....W System Power consumption pressure die cast aluminum housing with powder coating with IP 65 protection. 1, 200-275V voltage with electronic Driver, PF>0.9, should meet ANSI 2G Vibration test, Compliance to UL/CE with Class I. System rating shall be 50K hrs. @ Lumen maintenance of 70%, system efficacy > 80lm/w. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer.LED Floodlight 90W	each
3	Fabricating, supplying and erection of ...Mtrs long hot dip Galvanized Octagonal pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of ..... long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended.7 meters - Top 70mm and bottom 130mm dia	Each
4	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories. Double bracket	each
5	Single bracket 1.5 Mtr. Length	each
6	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A. 3 X 25 + 1 X 25 + 1 X 16 SQ.MM	Per Mtr
7	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
8	Suspension clamp assembly 25 to 95 sqmm bare messenger.	Each
9	Dead end clamp / Anchor clamp assembly 25 to 95 sqmm bare messenger,	Each
10	Universal Hook and Bolts and Nuts,	Each
11	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger.	Each
12	Erection of Anchor Clamp - 25 to 95 Sq. mm bare messenger.	Each
13	Fixing of Universal Hook.	Each
14	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 4 core 16 sqmm	Per Mtr
15	3.5 core 25 sqmm	Per Mtr
16	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct. 6 sqmm to 16 sqmm	per Mtr
17	b)25sqmm to 75 sqmm	Per Mtr
18	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. (As perCivil SR KSRB I-2, P-7).a) In soil (ordinary)	Per Mtr
19	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,.) 3-120sec setting.	Each

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Previous		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
		24	24250.00	582000.00	24	582000.00	
		12	12650.00	151800.00	12	151800.00	
		25	11000.00	275000.00	25	275000.00	
		0	1090.00	0.00	0	0.00	
		25	1000.00	25000.00	25	25000.00	
		385	177.00	68145.00	385	68145.00	
		385	10.00	3850.00	385	3850.00	
		10	981.00	9810.00	10	9810.00	
		6	100.00	600.00	6	600.00	
		10	25.00	250.00	10	250.00	
		10	25.00	250.00	10	250.00	
		6	25.00	150.00	6	150.00	
		0	30.00	0.00	0	0.00	
		361	100.00	36100.00	361	36100.00	
		50	150.00	7500.00	50	7500.00	
		361	10.00	3610.00	361	3610.00	
		50	10.00	500.00	50	500.00	
		300	50.00	15000.00	300	15000.00	
		2	2200.00	4400.00	2	4400.00	

not in MB

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20	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Each
21	Supplying and fixing miniature circuit breakes on exisiting MCB distribution boards using necessary fixing materials and wiring complete as required. b) 40-63Amps DP,2. Group 'A'	Each
22	f)40-63Amps TPN, Group A	Each
23	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or plug incase of brick walls and cement plastering damaged portionusing heavy gauge saddles at an interval of 700mm using NF screws.c)32mm dia 2.5mm thick	Per Mtr
24	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	Per Mtr
25	c)2.5sqmm	Per Mtr
26	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	Per Mtr
27	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia	Each
28	Supplying and fixing of Procelain fuse channel with cut out on exisiting wooden/panel using necessary nuts, bolts and washers etc., complete.d) 100 Amps	Each
29	Supplying and fixing of class A (medium duty) Gl pipe of wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class. c) 65mm	Per Mtr
30	Fabricating supplying and mounting MS box made out... SWG suitable lfor floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size cdlamps with mecessary cable entry pipe with gland and box should be finished with 2 cdoats of red oxide primer paint and finally finished with approved colour enameled metal pain etc., complete. b)16 swg	Sqcm
31	Supplying..... amps rated 3phase with neutral bus bar using requiemed capacity electrolytic aluminium strips covered with heat shrinkable couloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S. flat frame work in existing panel board. The bus bar shall gave suitable holes for termination of incoming and outgoing cables as per IS specification with necessary botls, nuts and washers etc., complete.b)250Amps 4X30X10mm Alluminium Strips	Per Mtr
32	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	Per Mtr
33	better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified	each
34	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.pipe	each
35	Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/Tees/Bends/End-caps of same materials in existing trench as per IS 14930 part -II suitable for drawing underground cables.40mm OD / 32mm ID	per mtr
	TOTAL	

Certificate:- Certify that the work has been carried out satisfactorily

JUNIOR ENGINEER (Elec.)
Bruhath

ASST.EXECUTIVE ENGINEER (Elec.)
Bruhath

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		3	9000.00	27000.00	3	27000.00	
		3	1000.00	3000.00	3	3000.00	
		1	1100.00	1100.00	1	1100.00	
		10	50.00	500.00	10	500.00	
		12 100	71.00	852/- 7100.00	12 100	852/- 7100.00	
		400	29.00	11600.00	400	11600.00	
		35	50.00	1750.00	35	1750.00	
		3	2700.00	8100.00	3	8100.00	
		6	400.00	2400.00	6	2400.00	
		2	580.00	1160.00	2	1160.00	
		59500	0.33	19635.00	59500	19635.00	
		2	2900.00	5800.00	2	5800.00	
		26	263.00	6838.00	26	6838.00	
		33	13000.00	429000.00	33	429000.00	
		33	393.00	12969.00	33	12969.00	
		397	98.00	38906.00	397	38906.00	
				1751823.00		1751823.00	

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